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PATENT APPLICATION

ATTORNEY DOCKET NO. 10002669-1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Raja Daoud, et al.

Confirmation No.: 6164

Application No.: 09/751,009

Examiner: Sall, El Hadji Malick

Filing Date: December 29, 2000

Group Art Unit: 2157

Title: APPARATUS AND METHOD FOR IDENTIFYING A REQUESTED LEVEL OF SERVICE FOR A TRANSACTION

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TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on September 14, 2006.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) $500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☐ 1st Month $120	☐ 2nd Month $450	☐ 3rd Month $1020	☐ 4th Month $1590

☐ The extension fee has already been filed in this application.

☒ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of $ 500 . At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

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Respectfully submitted,
Raja Daoud, et al.
By

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Confirmation No. 6164

Appl. No. : 09/751,009
Appellant : Raja Daoud, et al.
Filed : December 29, 2000
TC/A.U. : 2157
Examiner : Sall, El Hadji Malick

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APPEAL BRIEF

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Board of Patent Appeals and Interferences
United States Patent and Trademark Office
PO Box 1450
Alexandria, Virginia 22313-1450

APPEAL BRIEF

Dear Sir:

This Appeal Brief is submitted in response to the Examiner's second Final Office Action, dated July 25, 2006.

Appellants are filing a Notice of Appeal herewith, on September 14, 2006.

Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, Texas 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, California. The general or managing partner of HPDC is HPQ Holdings, LLC.

Related Appeals and Interferences

There are no related appeals and/or interferences.

Status of Claims

Claims 1-5, 9, 14, 15, 17 and 18 are pending, all of which stand rejected. A copy of the claims is attached as a Claims Appendix to this Appeal Brief.

Status of Amendments

All amendments have been entered.

Summary of Claimed Subject Matter

The following provides a concise explanation of the subject matter defined in each of the claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. §41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element.

In one embodiment (claim 1), apparatus for identifying a requested level of service (p. 3, line 28) for a transaction (p. 3, line 30) comprises computer readable program code (p. 15, line 15) stored in computer readable storage media (p. 15, line 16). The program code comprises: program code for prompting a user to select a requested level of service for said transaction (p. 9, lines 21-23; FIG. 8, 800); and program code for assigning said requested level of service to said transaction (p. 16, lines 18-20; FIG. 8, 810).

In another embodiment (claim 5), apparatus for identifying a requested level of service for a transaction (p. 3, line 30) comprises computer readable program code (p. 15, line 15) stored in computer readable storage media (p. 15, line 16). The program code comprises: program code for selecting said requested level of service for said transaction (p. 9, lines 21-23; FIG 8, 800), said requested level of service being based on a user identification (p. 7, line 30-p. 8, line 9; p. 9, lines 15-19); and program code for assigning said requested level of service to said transaction (p. 16, lines 18-20; FIG. 8, 810).

In yet another embodiment (claim 9), a method for requesting a level of service for a transaction on a network (p. 16, lines 12-12; FIG 8, 800) comprises: selecting said requested level of service for said transaction via a user interface (p. 9, line 22); and assigning said requested level of service to said transaction (p. 16, lines 18-20; FIG. 8, 810).

In still another embodiment (claim 14), apparatus for routing (p. 15, line 13) a transaction over a network based on a requested level of service associated with said transaction (p. 15, lines 13-16) comprises computer readable program code (p. 15, line 15) stored in computer readable storage media (p. 15, line 16). The computer readable program code comprises: a) program code for selecting said requested level of service for said transaction (p. 9, lines 21-23; FIG 8, 800); b) program code for assigning (p. 16, lines 18-20; FIG. 8, 810) a service tag (FIG. 2, 200) to said transaction , said service tag including said requested level of service (p. 7, lines 17-19), and said program code assigning parts of said service tag at more than one point on said network (p. 17, lines 9-13; FIG. 9, 910, 925, 935, 930, 940, 945); c) program code for reading said requested level of service from said service tag (p. 11, lines 11-16); and d) program code for directing said transaction over said network based on said requested level of service read from said service tag(FIG. 3; p. 10, lines 18-23).

Grounds of Rejection to be Reviewed on Appeal

I. Whether claims 1, 3, 4, 5 and 9 should be rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,871,233 to Bearden et al.

II. Whether claims 14, 15, 17, and 19 should be rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,483,805 to Davies et al.

III. Whether claim 2 should be rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,871,233 to Bearden et al. in view of U.S. Pat. No. 6,483,805 to Davies et al.

Argument

I. Claims 1, 3, 4, 5 and 9 should not be rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,871,233 to Bearden et al. (hereinafter "Bearden").

a. Claims 1 and 4

Appellants' claim 1 recites:

1. An apparatus for identifying a requested level of service for a transaction, comprising:
computer readable storage media; and
computer readable program code stored in said storage media, comprising:
a) program code for prompting a user to select a requested level of service for said transaction; and
b) program code for assigning said requested level of service to said transaction.

In rejecting claim 1, the Examiner asserts that:

. . .Bearden teaches an apparatus for identifying a requested level of service for a transaction, comprising:
computer readable storage media (figure 3, item 301); and
computer readable program code stored in said storage media, comprising:
a) program code for prompting a user to select a requested level of service for said transaction (column 1, lines 54-67; column 4, lines 20-25);
b) program code for assigning said requested level of service to said transaction (column 2, lines 3-7).

7/25/2006 Final Office Action, sec. 3, p. 3.

Appellants respectfully disagree. Bearden fails to show "a) program code for prompting a user to select a requested level of service for said transaction...". Instead, Bearden teaches how a user, such as an administrator, can:

> ...specify parameters for predefined types of service level QoS goals. A QoS goal is defined by specifying a client, a service and a QoS expression. A QoS expression is a proposition that indicates the client's desired range of values for some QoS metric, e.g., service response time or service availability.
>
> Bearden col. 1, lines 56-61.

As shown in Bearden's FIG. 4, and specifically in decision boxes 411 and 412, and in steps 417 and 418, Bearden's QoS goals cause the network resources assigned to a particular client to be increased or decreased based on whether a QoS goal was met (or not) for past transactions. Thus, the client is not prompted to "select a requested level of service" for ***any particular transaction***, but is only prompted to specify a QoS goal ***for all transactions***. The QoS goal is then enforced by a management server 301 (FIG. 3) which automatically allocates and de-allocates network resources to increase or decrease the QoS given to a *current* transaction, in response to the QoSs that were actually provided to *past* transactions. ***An overall QoS goal for a group of transactions is thereby maintained. If a user wants to request a particular level of service for any particular transaction, it appears that Bearden offers no way to do this.***

Claim 1 is believed to be allowable for at least the above reasons.

Claim 4 is believed to be allowable, at least, because it depends from claim 1.

b. Claim 3

With respect to claim 3, the Examiner asserts that Bearden teaches "program code for selecting a backup level of service" in FIG. 4, and in col. 5, line 45 - col. 6, line 24. Appellants disagree. The Examiner's cites only refer to allocating and de-allocating network resources to achieve *a single QoS goal* (or single set of goals). Appellants cannot find any mention of anything corresponding to a "backup level of service".

Claim 3 is believed to be allowable because it depends from claim 1, and for the additional reasons cited in the above paragraph.

c. Claim 5

Appellants' claim 5 recites:

> An apparatus for identifying a requested level of service for a transaction, comprising:
> computer readable storage media; and
> computer readable program code stored in said storage media, comprising:
> a) program code for selecting said requested level of service for said transaction, said requested level of service being based on a user identification; and
> b) program code for assigning said requested level of service to said transaction.

In rejecting claim 5, the Examiner asserts that:

> . . .Bearden teaches an apparatus for identifying a requested level of service for a transaction, comprising:
> computer readable storage media (figure 3, item 301); and computer readable program code stored in said storage media, comprising:
> a) program code for selecting said requested level of service for said transaction, said request[ed] level of service being based on a user identification (column 1, lines 54-67; column 4, lines 20-25; Column 2, lines 8-11);
> b) program code for assigning said requested level of service to said transaction (column 2, lines 3-7).

7/25/2006 Final Office Action, sec. 3, p. 4.

Appellants respectfully disagree. Bearden fails to show "a) program code for selecting said requested level of service for said transaction, said requested level of

service being based on a user identification...". Instead, Bearden teaches how a user, such as an administrator, can:

> ...specify parameters for predefined types of service level QoS goals. A QoS goal is defined by specifying a client, a service and a QoS expression. A QoS expression is a proposition that indicates the client's desired range of values for some QoS metric, e.g., service response time or service availability.
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As shown in Bearden's FIG. 4, and specifically in decision boxes 411 and 412, and in steps 417 and 418, Bearden's QoS goals cause the network resources assigned to a particular client to be increased or decreased based on whether a QoS goal was met (or not) for past transactions. Thus, the client is not prompted to "select a requested level of service" for any particular transaction, but is only prompted to specify a QoS goal for all transactions. The QoS goal is then enforced by a management server 301 (FIG. 3) which automatically allocates and de-allocates network resources to increase or decrease the QoS given to a *current* transaction, in response to the QoSs that were actually provided to *past* transactions. An overall QoS goal for a group of transactions is thereby maintained. There appears to be no way to select a "requested level of service for *[a] transaction*. . .based on a user identification" (emphasis added).

Claim 5 is believed to be allowable for at least the above reasons.

d. Claim 9

Claim 9 is believed to be allowable, at least, for reasons similar to why claim 1 is believed to be allowable.

II. Claims 14, 15, 17, and 19 should not be rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,483,805 to Davies et al. (hereinafter "Davies").

Appellants' claim 14 recites:

> An apparatus for routing a transaction over a network based on a requested level of service associated with said transaction, comprising:
> a number of computer readable storage media; and
> computer readable program code stored in said number of storage media, comprising:
> a) program code for selecting said requested level of service for said transaction;
> b) program code for assigning a service tag to said transaction, said service tag including said requested level of service, and said program code assigning parts of said service tag at more than one point on said network;
> c) program code for reading said requested level of service from said service tag; and
> d) program code for directing said transaction over said network based on said requested level of service read from said service tag.

The Examiner states, "a) program code for selecting said requested level of service for said transaction [is taught by Davies at] column 7, lines 47-59..." (*see*, 7/25/2006 Final Office Action, sec. 4, p. 5). Appellants respectfully disagree.

Davies states:

> Because of the nature of the packet traffic generated by an application requiring a transactional service (for example web page request and download) it is difficult to create such a Service Level Agreement based on a single class for such packets. The network is unable to predict or readily control the load imposed by traffic of this nature.

Davies, column 7, lines 47-59.

Appellants fail to appreciate the relevance of the cited reference and find no teaching or suggestion of the claimed limitation. Ignoring for the moment that the

reference routes packets, as opposed to directing transactions, the reference appears to be teaching away from the Appellants' claim 14. While Davies finds it "difficult to create" a single class of packets for a transaction for predicting and controlling the load of such packets, claim 14 selects level of service for a transaction, assigns a service tag to a transaction, and then directs the transaction accordingly.

The Examiner also asserts that:

> b) program code for assigning a service tag to said transaction, said service tag includes said requested level of service, and said program code assigning parts of said service tag at more than one point on said network [is taught by Davies at] column 6, line 66 to column 7, line 6 [and] column 8, line 62 to column 9, line 4...
>
> 7/25/2006 Final Office Action, sec. 4, p. 5.

Appellants disagree. Davies teaches, "...marking each individual **packet** used to deliver data across an IP network with a code comprising a small number of bits. (Davies, col. 6, line 66 – col. 7, line 6). Appellants' claim 14 recites, "assigning a service tag to [a] **transaction**".

Davies at column 8, line 62 to column 9, line 4 discusses the throttling of the data flow sent by a TCP source via a windowing mechanism. Appellants fail to appreciate the relevance of the reference and find no teaching or suggestion of the claimed limitation.

The Examiner then asserts that:

> c) reading said requested level of service from said service; and
> d) directing said transaction over said network based on said requested level of service read from said service tag [is taught by Davies at] column 7, lines 34-45.
>
> 7/25/2006 Final Office Action, sec. 4, p. 5.

Appellants disagree. What Davies teaches is:

> Routers which process the packets as they are **forwarded** across the IP network inspect the code and treat each packet marked with the same value in the same way when determining the priority or preference to give to those packets on the next hop of their path through the network. **Each set of similarly-marked packets constitutes an** [sic] **class, and by applying different treatments to different classes a different quality of service can be obtained for each class.** For example, access to a portion of the network may be refused to traffic in a given class which exceeds, in some measurable way, a previously agreed contract typically known Service Level Agreement (SLA).
>
> Davies, column 7, lines 34-45.

Appellants' claim 14 teaches the reading of a level of service from a **transaction's** service tag and **directing** the **transaction** accordingly, whereas Davies **routes packets**. Davies' purpose for placing "a small number of bits" on a packet is to lump certain "bits" into classes. The classes are then subject to class-specific routing. Routing is the passive execution of processes to *allow* a packet to reach its intended destination. Directing, as in claim 14, actively *determines* where the transaction is to go.

For at least the above reasons, claim 14 is believed to be allowable. Claims 15, 17, and 18 are believed allowable for at least the reason that they depend from claim 14.

III. Claim 2 should not be rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,871,233 to Bearden et al. (hereinafter "Bearden") in view of U.S. Pat. No. 6,483,805 to Davies et al. (hereinafter "Davies")

Appellants' claim 2 recites:

> An apparatus, as in claim 1, wherein said transaction is a packetized signal comprising at least a data packet, and wherein a service tag is associated with said data packet by said program code

for assigning said requested level of service, said service tag including said requested level of service..

Appellants believe claim 2 is allowable, at least, for the reason that it depends from claim 1, which is believed to be allowable over Bearden. *See*, Section 1 of these Remarks/Arguments, *supra*. Davies fails to teach what is missing from Bearden.

Furthermore, the references lack any suggestion to be combined, and such a combination would be counterintuitive. Davies teaches the routing of packets (Davies, abstract). It is known in the art that packets may be a portion of data or a transaction. A solution that is indifferent to a packet's content, that is, if the packet is a transaction, a portion of a transaction, or, for example, a video file, is unlikely to be considered a viable solution to transaction routing. Davies also views the problem of managing individual flows of packets, let alone individual packets, as an impossibility.

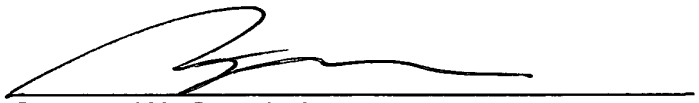
> To avoid problems of scalability in the core of large networks, where there are many hundreds or thousands or millions of flows of packets, **the QoS cannot be specified at the granularity of individual flows** in the core of the network. The treatment of packets in the core of the network to achieve the desired QoS must be very simple: there is very little time and processing effort available for each packet in a network core device in which a new packet may be arriving as frequently as every 50-100 ns.
>
> Davies, p. 6, lines 41-49.

Claim 2 is believed to be allowable for at least the above reasons.

Conclusion

In summary, the art of record does not teach nor suggest the subject matter of Appellants' claims 1-5, 9, 14, 15, 17 and 18. These claims are therefore believed to be allowable.

Respectfully submitted,
DAHL & OSTERLOTH, L.L.P.

By: 

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Claims Appendix

1. An apparatus for identifying a requested level of service for a transaction, comprising:

computer readable storage media; and

computer readable program code stored in said storage media, comprising:

a) program code for prompting a user to select a requested level of service for said transaction; and

b) program code for assigning said requested level of service to said transaction.

2. An apparatus, as in claim 1, wherein said transaction is a packetized signal comprising at least a data packet, and wherein a service tag is associated with said data packet by said program code for assigning said requested level of service, said service tag including said requested level of service.

3. An apparatus, as in claim 1, further comprising:

a) program code for selecting a backup level of service; and

b) program code for assigning said backup level of service to said transaction.

4. An apparatus, as in claim 1, wherein said requested level of service is a predefined service category.

5. An apparatus for identifying a requested level of service for a transaction, comprising:

computer readable storage media; and

computer readable program code stored in said storage media, comprising:

a) program code for selecting said requested level of service for said transaction, said requested level of service being based on a user identification; and

b) program code for assigning said requested level of service to said transaction.

6. (canceled)

7. (canceled)

8. (canceled)

9. A method for requesting a level of service for a transaction on a network, comprising:

selecting said requested level of service for said transaction via a user interface; and

assigning said requested level of service to said transaction.

10. (canceled)

11. (canceled)

12. (canceled)

13. (canceled)

14. An apparatus for routing a transaction over a network based on a requested level of service associated with said transaction, comprising:

a number of computer readable storage media; and

computer readable program code stored in said number of storage media, comprising:

a) program code for selecting said requested level of service for said transaction;

b) program code for assigning a service tag to said transaction, said service

tag including said requested level of service, and said program code assigning parts of said service tag at more than one point on said network;

c) program code for reading said requested level of service from said service tag; and

d) program code for directing said transaction over said network based on said requested level of service read from said service tag.

15. An apparatus, as in claim 14, wherein said transaction is directed over said network to a device best providing said requested level of service.

16. (canceled)

17. An apparatus, as in claim 14, wherein said service tag is read by program code at more than one point on said network.

18. An apparatus, as in claim 14, further comprising program code for changing said requested level of service included on said service tag.

19. (canceled)

20. (canceled)

Evidence Appendix

None.

Related Proceedings Appendix

None.